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(FILE 'HOME' ENTERED AT 12:59:51 ON 18 DEC 2006)

FILE 'CAPLUS, MEDLINE, EMBASE, BIOSIS, SCISEARCH' ENTERED AT 13:03:11 ON
18 DEC 2006

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L1      83550 SEA ABB=ON  PLU=ON  "CONSTITUTIVELY ACTIVE NUCLEAR RECEPTOR"
        OR "ORPHAN NUCLEAR RECEPTOR" OR CAR
L2      68527 SEA ABB=ON  PLU=ON  XENOBIOTIC OR XENOCHMICAL
L3      1042 SEA ABB=ON  PLU=ON  L1 AND L2
L4      627 SEA ABB=ON  PLU=ON  L1 (S) L2
L5      890 SEA ABB=ON  PLU=ON  L1 (P) L2
L6      10 SEA ABB=ON  PLU=ON  L1 (W) L2
L7      747 SEA ABB=ON  PLU=ON  PHENOBARBITOL OR TCPOBOP
L8      140 SEA ABB=ON  PLU=ON  L1 AND L7
L9      132 SEA ABB=ON  PLU=ON  L1 (P) L7
L10     40 DUP REM L9 (92 DUPLICATES REMOVED)
        DIS L10 1-40 TI SO AU
L11     9845 SEA ABB=ON  PLU=ON  "STEROID METABOL" OR "STEROID METABOLISM"
L12     45 SEA ABB=ON  PLU=ON  L11 AND L1
L13     28 DUP REM L12 (17 DUPLICATES REMOVED)
        DIS L13 1-28 TI SO AU
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<!--StartFragment-->RESULT 1

CXAR_HUMAN

ID CXAR_HUMAN STANDARD; PRT; 365 AA.
 AC P78310; O00694; Q8WWT6; Q8WWT7; Q8WWT8; Q9UKV4;
 DT 30-MAY-2000, integrated into UniProtKB/Swiss-Prot.
 DT 01-MAY-1997, sequence version 1.
 DT 07-MAR-2006, entry version 57.
 DE Coxsackievirus and adenovirus receptor precursor (Coxsackievirus B-
 DE adenovirus receptor) (hCAR) (CVB3-binding protein) (HCVADR).
 GN Name=CXADR; Synonyms=CAR;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
 OC Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP NUCLEOTIDE SEQUENCE [MRNA] (ISOFORM 1), FUNCTION AS VIRUS RECEPTOR,
 RP AND TISSUE SPECIFICITY.
 RX MEDLINE=97250541; PubMed=9096397; DOI=10.1073/pnas.94.7.3352;
 RA Tomko R.P., Xu R., Philipson L.;
 RT "hCAR and MCAR: the human and mouse cellular receptors for subgroup C
 RT adenoviruses and group B coxsackieviruses."
 RL Proc. Natl. Acad. Sci. U.S.A. 94:3352-3356(1997).
 RN [2]
 RP NUCLEOTIDE SEQUENCE [MRNA] (ISOFORM 1).
 RX MEDLINE=97190109; PubMed=9036860; DOI=10.1126/science.275.5304.1320;
 RA Bergelson J.M., Cunningham J.A., Droguett G., Kurt-Jones E.,
 RA Krithivas A., Hong J.S., Horwitz M.S., Crowell R.L., Finberg R.W.;
 RT "Isolation of a common receptor for Coxsackie B viruses and
 RT adenoviruses 2 and 5."
 RL Science 275:1320-1323(1997).
 RN [3]
 RP NUCLEOTIDE SEQUENCE [GENOMIC DNA].
 RX MEDLINE=20008750; PubMed=10543405; DOI=10.1007/s004390051114;
 RA Bowles K.R., Gibson J., Wu J., Shaffer L.G., Towbin J.A., Bowles N.E.;
 RT "Genomic organization and chromosomal localization of the human
 RT Coxsackievirus B-adenovirus receptor gene."
 RL Hum. Genet. 105:354-359(1999).
 RN [4]
 RP NUCLEOTIDE SEQUENCE [GENOMIC DNA].
 RX PubMed=11573093; DOI=10.1038/nsb1001-874;
 RA He Y., Chipman P.R., Howitt J., Bator C.M., Whitt M.A., Baker T.S.,
 RA Kuhn R.J., Anderson C.W., Freimuth P., Rossmann M.G.;
 RT "Interaction of coxsackievirus B3 with the full length coxsackievirus-
 RT adenovirus receptor."
 RL Nat. Struct. Biol. 8:874-878(2001).
 RN [5]
 RP NUCLEOTIDE SEQUENCE [MRNA] (ISOFORMS 3; 4 AND 5), INTERACTION WITH
 RP COXSACKIEVIRUS TYPE B3, AND SUBCELLULAR LOCATION.
 RX PubMed=14978041; DOI=10.1074/jbc.M311754200;
 RA Doerner A., Xiong D., Couch K., Yajima T., Knowlton K.U.;
 RT "Alternatively spliced soluble coxsackie-adenovirus receptors inhibit
 RT coxsackievirus infection."
 RL J. Biol. Chem. 279:18497-18503(2004).
 RN [6]
 RP NUCLEOTIDE SEQUENCE [GENOMIC DNA].
 RA Andersson B., Tomko R.P., Andersson K., Darban H., Oncu D., Mizra M.,
 RA Sollerbrant K., Sonnhhammer E., Philipson L.;
 RT "Putative regulatory domains in the human and mouse CAR genes."
 RL Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.
 RN [7]

protein
 Leu 342
 Leu 343

RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA] (ISOFORM 2).
 RC TISSUE=Cervix;
 RA Li W.B., Gruber C., Jessee J., Polayes D.;
 RT "Full-length cDNA libraries and normalization.";
 RL Submitted (JUL-2004) to the EMBL/GenBank/DDBJ databases.
 RN [8]
 RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA] (ISOFORM 1).
 RA Kalnine N., Chen X., Rolfs A., Halleck A., Hines L., Eisenstein S.,
 RA Koundinya M., Raphael J., Moreira D., Kelley T., LaBaer J., Lin Y.,
 RA Phelan M., Farmer A.;
 RT "Cloning of human full-length CDSs in BD Creator(TM) system donor
 RT vector.";
 RL Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
 RN [9]
 RP NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA] (ISOFORM 1).
 RC TISSUE=Cervix;
 RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahey J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
 RA Schnerker A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences.";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 RN [10]
 RP PARTIAL NUCLEOTIDE SEQUENCE [MRNA] (ISOFORM 2), AND TISSUE
 RP SPECIFICITY.
 RC TISSUE=Liver;
 RX MEDLINE=99422053; PubMed=10490761; DOI=10.1038/sj.gt.3301030;
 RA Fechner H., Haack A., Wang H., Wang X., Eizema K., Pauschinger M.,
 RA Schoemaker R.G., van Veghel R., Houtsmuller A.B., Schultheiss H.-P.,
 RA Lamers J.M.J., Poller W.;
 RT "Expression of Coxsackie-adenovirus-receptor and alpha v-integrin does
 RT not correlate with adenovector targeting in vivo indicating anatomical
 RT vector barriers.";
 RL Gene Ther. 6:1520-1535(1999).
 RN [11]
 RP FUNCTION IN VIRAL BINDING, AND MUTAGENESIS OF 70-VAL--ILE-72.
 RX PubMed=10666333; DOI=10.1006/excr.1999.4761;
 RA Tomko R.P., Johansson C.B., Totrov M., Abagyan R., Frisen J.,
 RA Philipson L.;
 RT "Expression of the adenovirus receptor and its interaction with the
 RT fiber knob.";
 RL Exp. Cell Res. 255:47-55(2000).
 RN [12]
 RP ALTERNATIVE SPLICING, AND TISSUE SPECIFICITY.
 RX PubMed=11549277; DOI=10.1006/bbrc.2001.5535;
 RA Thoelen I., Magnusson C., Tagerud S., Polacek C., Lindberg M.,

RA Van Ranst M.;
 RT "Identification of alternative splice products encoded by the human
 RT coxsackie-adenovirus receptor gene.";
 RL Biochem. Biophys. Res. Commun. 287:216-222(2001).
 RN [13]
 RP TISSUE SPECIFICITY.
 RX PubMed=11457744;
 RA Noutsias M., Fechner H., de Jonge H., Wang X., Dekkers D.,
 RA Houtsmuller A.B., Pauschinger M., Bergelson J.M., Warraich R.,
 RA Yacoub M., Hetzer R., Lamers J.M.J., Schultheiss H.-P., Poller W.;
 RT "Human coxsackie-adenovirus receptor is colocalized with integrins
 RT alpha(v)beta(3) and alpha(v)beta(5) on the cardiomyocyte sarcolemma
 RT and upregulated in dilated cardiomyopathy: implications for
 RT cardiotropic viral infections.";
 RL Circulation 104:275-280(2001).
 RN [14]
 RP SUBCELLULAR LOCATION, AND MUTAGENESIS OF TYR-318 AND 345-LEU--MET-348.
 RX PubMed=11316797; DOI=10.1074/jbc.M009531200;
 RA Cohen C.J., Gaetz J., Ohman T., Bergelson J.M.;
 RT "Multiple regions within the coxsackievirus and adenovirus receptor
 RT cytoplasmic domain are required for basolateral sorting.";
 RL J. Biol. Chem. 276:25392-25398(2001).
 RN [15]
 RP SUBCELLULAR LOCATION, INTERACTION WITH TJP1, AND FUNCTION:
 RX PubMed=11734628; DOI=10.1073/pnas.261452898;
 RA Cohen C.J., Shieh J.T.C., Pickles R.J., Okegawa T., Hsieh J.-T.,
 RA Bergelson J.M.;
 RT "The coxsackievirus and adenovirus receptor is a transmembrane
 RT component of the tight junction.";
 RL Proc. Natl. Acad. Sci. U.S.A. 98:15191-15196(2001).
 RN [16]
 RP SUBCELLULAR LOCATION, INTERACTION WITH CTNBN1, AND FUNCTION.
 RX MEDLINE=22233435; PubMed=12297051; DOI=10.1016/S0092-8674(02)00912-1;
 RA Walters R.W., Freimuth P., Moninger T.O., Ganske I., Zabner J.,
 RA Welsh M.J.;
 RT "Adenovirus fiber disrupts CAR-mediated intercellular adhesion
 RT allowing virus escape.";
 RL Cell 110:789-799(2002).
 RN [17]
 RP INTERACTION WITH LNX.
 RX PubMed=12468544; DOI=10.1074/jbc.M205927200;
 RA Sollerbrant K., Raschperger E., Mirza M., Engstroem U., Philipson L.,
 RA Ljungdahl P.O., Pettersson R.F.;
 RT "The Coxsackievirus and adenovirus receptor (CAR) forms a complex with
 RT the PDZ domain-containing protein ligand-of-numb protein-X (LNX).";
 RL J. Biol. Chem. 278:7439-7444(2003).
 RN [18]
 RP SUBCELLULAR LOCATION, AND TISSUE SPECIFICITY (ISOFORMS 1 AND 2).
 RX PubMed=15533241; DOI=10.1186/1471-2121-5-42;
 RA Shaw C.A., Holland P.C., Sinnreich M., Allen C., Sollerbrant K.,
 RA Karpati G., Nalbantoglu J.;
 RT "Isoform-specific expression of the Coxsackie and adenovirus receptor
 RT (CAR) in neuromuscular junction and cardiac intercalated discs.";
 RL BMC Cell Biol. 5:42-42(2004).
 RN [19]
 RP INTERACTION WITH MPDZ, AND SUBCELLULAR LOCATION.
 RX PubMed=15364909; DOI=10.1074/jbc.M409061200;
 RA Coyne C.B., Voelker T., Pichla S.L., Bergelson J.M.;
 RT "The coxsackievirus and adenovirus receptor interacts with the multi-
 RT PDZ domain protein-1 (MUPP-1) within the tight junction.";
 RL J. Biol. Chem. 279:48079-48084(2004).

RN [20]
 RP INTERACTIONS WITH BAIAP1; DLG4 AND PRKCABP.
 RX PubMed=15304526; DOI=10.1242/jcs.01300;
 RA Ashbourne-Excoffon K.J.D., Hruska-Hageman A.M., Klotz M., Traver G.L.,
 RA Zabner J.;
 RT "A role for the PDZ-binding domain of the coxsackie B virus and
 RT adenovirus receptor (CAR) in cell adhesion and growth.";
 RL J. Cell Sci. 117:4401-4409(2004).
 RN [21]
 RP PHOSPHORYLATION SITE SER-332.
 RX PubMed=15302935; DOI=10.1073/pnas.0404720101;
 RA Beausoleil S.A., Jedrychowski M., Schwartz D., Elias J.E., Villen J.,
 RA Li J., Cohn M.A., Cantley L.C., Gygi S.P.;
 RT "Large-scale characterization of HeLa cell nuclear phosphoproteins.";
 RL Proc. Natl. Acad. Sci. U.S.A. 101:12130-12135(2004).
 RN [22]
 RP INTERACTION WITH AMICA1, DOMAIN, AND FUNCTION.
 RX PubMed=15800062; DOI=10.1091/mbc.E05-01-0036;
 RA Zen K., Liu Y., McCall I.C., Wu T., Lee W., Babbitt B.A., Nusrat A.,

Query Match 99.4%; Score 1880; DB 1; Length 365;
 Best Local Similarity 99.5%; Pred. No. 2.9e-136;
 Matches 363; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Qy     61 PADNQKVDQVIIILYSGDKIYDDYYPDLKGRVHFTSNDLKSGDASINVTNLQLSDIGTYQC 120
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Db     61 PADNQKVDQVIIILYSGDKIYDDYYPDLKGRVHFTSNDLKSGDASINVTNLQLSDIGTYQC 120

Qy    121 KVKKAPGVANKKIHVLVVKPSGARCIVDGSSEEIGSDFKIKCEPKESLPLQYEWQKLSLSD 180
         ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    121 KVKKAPGVANKKIHVLVVKPSGARCIVDGSSEEIGSDFKIKCEPKESLPLQYEWQKLSLSD 180

Qy    181 SQKMPTSWLAEMTSSVISVKNASSEYSGTYSCTVRNRVGSQCLLRNLNVPPSNKAGLIA 240
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Qy    361 DGSIV 365
         |||||
Db    361 DGSIV 365

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